

Wandiga Shem Oyoo, Mbugua Simon Ngigi, Jane W. Macharia, Kamau Geoffrey Njuguna and Lydia W. Njenga. Water purification using photo catalysis and clay filtration. A paper presented at the Pan Africa Chemistry Network Symposium on: Regulatory Harmonisation, Hygiene and Sustainability, University of Nairobi, Kenya 4-5 Nov. 2014.

Abstract

The socio-economic and medical information on a community of the people living in Bondo sub-county on the shores of Lake Victoria, Kenya is studied. Data was collected to support establishing the relationship between the water quality challenges, community health and water rights conditions. The socio-economic and medical information on a community of the people living in Bondo sub-county on the shores of Lake Victoria, Kenya is studied. Data was collected to support establishing the relationship between the water quality challenges, community health and water rights conditions. About 69% of the households overall have no access to treated water. 92% of the respondents appear to be aware that treatment of water prevents water borne diseases. However, of those households that had at least one member hospitalized and deceased respectively due to water borne diseases, 64.74% and 60.4% were from the lowest income group (ksh 0-15,000). Children as a cohort share a high burden of water borne diseases 82.88%. Of all the mortality cases arising from such diseases 50.59% were children with 37.3 % coming from the lowest income group (ksh 0-15,000). The increase in the prevalence and incidence of waterborne diseases during the wet season is due to continuing practice of open defecation in these areas (12.3%) study. Health challenges have been linked to

- water quality at the point of use and
- household income.